NOVEL PENICILLIN

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Publication date: 1982-07-23
Inventor(s): SAIKAWA ISAMU; others: 08
Applicant(s): TOYAMA KAGAKU KOGYO KK
Requested Patent: ☐ JP57118587
Application Number: JP19810188407 19811126
Priority Number(s):
IPC Classification: C07D499/68; A61K31/43
EC Classification:
Equivalents:

Abstract

NEW MATERIAL:A compound expressed by formula I(R is an amino acid residue; R<1> is H, a group for forming a protecting group, etc.; X is O and linked to the 2- or the 3-position of the piperazine ring; m is 3; R<2> and R<3> are linked to the same carbon atom; R<2>m and R<3>m are H, alkyl, etc.; A is H or alkyl, alkenyl, etc. which may have a substituent group, etc.).
EXAMPLE:6-[D(-)-alpha-(4-n-Hexyl-2-oxo-1-piperazinocarbonylamino)phenylacetamido]peniicillanic acid.
USE:An antimicrobial agent, having a wide antimicrobial spectrum against Gram-positive and Gram-negative bacteria, and particularly effective against Pseudomonas aeruginosa, Klebsiella pneumoniae and myxomycetes and further against drug-resistant germs.
PROCESS:A compound expressed by formula II (R<6> is H, silyl, etc.; R<7> is H, a group for forming a protecting group, etc.) is reacted with a reactive derivative at the carboxyl group of a compound expressed by formula III to give the aimed compound expressed by formula I.

PENICILLINS AND CEPHALOSPORINS AND PROCESS FOR PRODUCING THE SAME

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Inventor(s):	KOMATSU M;; MOMONOI K;; SAIKAWA I;; TAKASHIMA;; YOSHIDA C;; KODAMA;; KURODA S;; TAKANO S;; YASUDA T
Applicant(s):	TOYAMA CHEMICAL CO LTD
Requested Patent:	☐ DE2519400
Application Number:	GB19750017557 19750428
Priority Number(s):	JP19750037207 19750327; JP19740050663 19740509; JP19740052254 19740513; JP19740060787 19740531; JP19740091996 19740813; JP19740109954 19740926; JP19740142499 19741213
IPC Classification:	C07D499/64; A61K31/43; A61K31/545; C07D501/20
EC Classification:	C07D499/00
Equivalents:	AR209607, ☐ AT344906B, AU8043175, ☐ BE828692, ☐ CH605995, CY1026, ☐ DD117882, DE2560239, ☐ DK151338B, DK151338C, DK201975, ☐ FI63760B, ☐ FI63760C, FI751340, ☐ FR2269937, ☐ FR2320295, ☐ GB1508064, HK26279, HU169633, IL47168, KE2923, NL162386B, ☐ NL162386C, ☐ NL7505375, PH20534, PH21545, PH21987, PH22336, PH22346, ☐ SE431457, ☐ SE435062

Abstract

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L3 ANSWER 2 OF 2 CA COPYRIGHT 2003 ACS

AN **85:33052** CA Full-text

TI Penicillin and cephalosporin derivatives

IN Saikawa, Isamu; Takano, Shuntaro; Yoshida, Chosaku; Takashima, Okuta; Momonoi, Kaishu;
Kuroda, Seietsu; Komatsu, Miwako; Yasuda, Takashi; Kodama, Yutaka

PA Toyama Chemical Co., Ltd., Japan

SO Ger. Offen., 237 pp.

LA German FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE---2519400	A1	19760304	1975DE-2519400	19750430
	DE---2519400	B2	19810521		
	DE---2519400	C3	19820211		
	JP--50148378	A2	19751127	1974JP-0050663	19740509
	JP--50148380	A2	19751127	1974JP-0052254	19740513
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	ES----454267	A1	19771216	1976ES-0454267	19761215
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	1974JP-0060787		19740531	1974JP-0091996	19740813
	1974JP-0109954		19740926	1974JP-0142499	19741213
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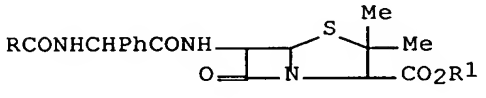
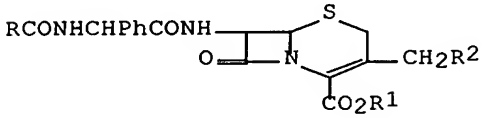
GI



I



II

AB Acylaminobenzylpenams I and -cephems II (R = substituted oxopiperazino; R1 = H, Na, ester; R2 = H, OAc, heterocyclic thiol) (164 compds.) were prepared by acylating aminobenzylpenams and -cephems. Thus 1-acetyl-3- oxopiperazine was treated with COCl2 and used to acylate ampicillin to I (R = 4-acetyl-2-oxopiperazino, R1 = Na).